

## ECONOMICALLY VIABLE HOLDING SIZE OF TENANT FARMING IN IRRIGATED SETTLEMENTS

T.A.J. Somathilaka<sup>1</sup>, K.S. Karunagoda<sup>2</sup> and A.P.S. Fernando<sup>1</sup>

<sup>1</sup>*Dept. of Agricultural Systems, Faculty of Agriculture, Rajarata University of Sri Lanka,  
Puliyankulama, Anuradhapura, Sri Lanka.*

<sup>2</sup>*Socio Economics and Planning Centre, Dept. of Agriculture, Peradeniya, Sri Lanka.*

Land is a resource with constant supply and threatened by escalating population pressure. Farmers get access to land via different mechanisms and rental market is one of them. When lands were rented, there is a decline in land productivity due to inefficient use. This study attempts to investigate the economically viable holding size under tenancy by means of productivity, cost of cultivation and factors affecting on productivity. The study was conducted during 2010 *Yala* and 2010/11 *Maha* seasons in five major irrigation schemes in *Anuradhapura* district. Farmers were sampled with stratified random sampling method and data were collected using a pre-tested questionnaire. Regression analysis was conducted to identify the factors affecting productivity. The average lowland sizes of the selected irrigation schemes were 1.56, 1.35, 2.18, 1.50, and 1.07 acs in *Huruluweva*, *Nachchaduva*, *Padaviya*, *Rajanganaya*, *Mahavilachchiya* respectively. Results indicated that land size has negatively affected the productivity. A significant positive relationship was found between productivity and cost of seeds. Per acre cost of cultivation of paddy under tenancy was Rs. 46,297 (including land rent) while that of the owner operator was Rs. 25,021. Paddy-paddy, paddy-vegetables and paddy-fallow are the prominent farming systems of the area. About 76.6% of households have access to off-farm income sources and accounts for 32.2% of total monthly income of the family. The smallest extent of paddy land cultivated by a tenant within a period of one year was 0.54 acres and that was under the paddy vegetable farming system though the stipulated holding size is 1.5 acres. Further research should carried out to determine the impacts of off farm income sources on the fragmentation of agricultural lowlands, land suitability for crop diversification and income risks. It suggests that land policies on minimum holding size could be revised accordingly.

**Key words:** Holding size, Irrigated settlements, Tenant paddy farming